

IN THE CLAIMS

The current claims follow. For claims not marked as amended in this response, any difference in the claims below and the previous state of the claims is unintentional and in the nature of a typographical error.

1. (Currently Amended) For use in a wireless communication system comprising a mobile switching center, at least two base stations and at least one mobile station, an apparatus for providing mobile station registration in a traffic channel, wherein the apparatus comprises:

at least one base station that is capable of receiving in a traffic channel at least one mobile station registration message initiated from at least one mobile station; and

at least one mobile station that is capable of sending in a traffic channel at least one mobile station registration message to least one base station before the mobile station registration is complete.

2. (Original) The apparatus as set forth in Claim 1 wherein:

said at least one base station is capable of receiving in a reverse traffic channel a registration message from said at least one mobile station;

said at least one base station is capable of causing said mobile switching center to register said at least one mobile station in said wireless communication system; and

said at least one base station is capable of sending a registration accepted order to said at least

one mobile station in a forward traffic channel.

3. (Original) The apparatus as set forth in Claim 2 wherein said mobile switching center is capable of causing a registration request message to be sent to said at least one mobile station in a traffic channel.

4. (Original) The apparatus as set forth in Claim 1 wherein said at least one base station comprises a traffic channel registration controller that is capable of one of: sending mobile station registration messages in a traffic channel to said at least one mobile station and receiving mobile station registration messages in a traffic channel from said at least one mobile station.

5. (Currently Amended) The apparatus as set forth in Claim 4 wherein:
said traffic channel registration controller is capable of receiving in a reverse traffic channel a registration request message from said at least one mobile station;
said traffic channel registration controller is capable of causing said mobile switching center to register said at least one mobile station in said wireless communication system; and
said traffic channel registration controller is capable of sending a registration accepted order to said at least one mobile station in a forward traffic channel.

6. (Currently Amended) The apparatus as set forth in Claim 5 wherein said mobile

switching center is capable of sending a registration ~~request~~ message to said traffic channel registration controller for forwarding to said at least one mobile station in a traffic channel.

7. (Original) The apparatus as set forth in Claim 6 wherein said at least one base station is capable of sending a location update request message to said mobile switching center and is capable of receiving a location update acceptance message from said mobile switching center.

8. (Currently Amended) A wireless communication system comprising:
a mobile switching center and a plurality of base stations capable of communicating with a plurality of mobile stations; and

an apparatus for providing mobile station registration in a traffic channel, wherein the apparatus comprises:

at least one base station of said plurality of base stations that is capable of receiving in a traffic channel at least one mobile station registration message initiated from at least one mobile station of said plurality of mobile stations; and

at least one mobile station of said plurality of mobile stations that is capable of sending in a traffic channel at least one mobile station registration message to least one base station of said plurality of base stations before the mobile station registration is complete.

9. (Original) The wireless communication system as set forth in Claim 8 wherein:

said at least one base station is capable of receiving in a reverse traffic channel a registration message from said at least one mobile station;

said at least one base station is capable of causing said mobile switching center to register said at least one mobile station in said wireless communication system; and

said at least one base station is capable of sending a registration accepted order to said at least one mobile station in a forward traffic channel.

10. (Original) The wireless communication system as set forth in Claim 9 wherein said mobile switching center is capable of causing a registration request message to be sent to said at least one mobile station in a traffic channel.

11. (Original) The wireless communication system as set forth in Claim 8 wherein said at least one base station comprises a traffic channel registration controller that is capable of one of: sending mobile station registration messages in a traffic channel to said at least one mobile station and receiving mobile station registration messages in a traffic channel from said at least one mobile station.

12. (Currently Amended) The wireless communication system as set forth in Claim 11 wherein:

said traffic channel registration controller is capable of receiving in a reverse traffic channel a registration request message from said at least one mobile station;

said traffic channel registration controller is capable of causing said mobile switching center to register said at least one mobile station in said wireless communication system; and

said traffic channel registration controller is capable of sending a registration accepted order to said at least one mobile station in a forward traffic channel.

13. (Currently Amended) The wireless communication system as set forth in Claim 12 wherein said mobile switching center is capable of sending a registration request message to said traffic channel registration controller for forwarding to said at least one mobile station in a traffic channel.

14. (Original) The wireless communication system as set forth in Claim 13 wherein said at least one base station is capable of sending a location update request message to said mobile switching center and is capable of receiving a location update acceptance message from said mobile switching center.

15. (Currently Amended) For use in a wireless communication system comprising a mobile switching center, at least two base stations and at least one mobile station, a method for registering at least one mobile station in said wireless communication system, wherein the method comprises the steps of:

initiating and sending from said at least one mobile station at least one mobile station registration message in a traffic channel to at least one base station;

receiving in said at least one base station said at least one mobile station registration message sent in a traffic channel from said at least one mobile station; and

registering said at least one mobile station in said mobile switching center of said wireless communication system.

16. (Original) The method as set forth in Claim 15 further comprising the steps of:

sending a registration message on a reverse traffic channel from said at least one mobile station to said at least one base station; and

sending a registration accepted order message on a forward traffic channel from said at least one base station to said at least one mobile station.

17. (Original) The method as set forth in Claim 16 further comprising the steps of:

 sending a location update request message from said at least one base station to said mobile switching center after said at least one base station receives said registration request message from said at least one mobile station; and

 receiving in said at least one base station a location update acceptance message from said mobile switching center before said at least one base station sends a registration accepted order message to said at least one mobile station.

18. (Original) The method as set forth in Claim 15 further comprising the steps of:

 sending a registration request message from a mobile switching center to said at least one base station; and

 sending said registration request message from said at least one base station in a forward traffic channel to said at least one mobile station.

19. (Original) The method as set forth in Claim 18 further comprising the steps of:

in response to receiving said registration request message in a forward traffic channel from said at least one base station, sending a registration message in a reverse traffic channel from said at least one mobile station to said at least one base station;

sending a location update request message from said at least one base station to said mobile switching center;

receiving in said at least one base station a location update acceptance message from said mobile switching center; and

sending a registration accepted order message in a forward traffic channel from said at least one base station to said at least one mobile station.

20. (Original) The method as set forth in Claim 15 further comprising the steps of:

sending from said at least one mobile station at least one mobile station registration message in a traffic channel to a traffic channel registration controller in at least one base station;

receiving in said traffic channel registration controller in said at least one base station said at least one mobile station registration message sent in a traffic channel from said at least one mobile station; and

using said traffic channel registration controller to cause said mobile switching center to register said at least one mobile station in said wireless communication system.